APPENDIX B
Submitted Written Public Comments*

(Additional Written Public Comments from the July 26, 2004 Meeting may be found on the 911 Environmental Action Website: http://911ea.org)

***THE FOLLOWING PUBLIC COMMENTS WERE RECEIVED AT THE EXPERT TECHNICAL PANEL REVIEW MEETING #5. NOTE, THE MEETING IS NOT A PUBLIC HEARING TO HEAR TESTIMONY, BUT RATHER A TECHNICAL MEETING FOR EXPERT PANEL MEMBER DISCUSSIONS WITH TIME SET ASIDE TO HEAR COMMENTS FROM THE PUBLIC ON DISCUSSION TOPICS.**

Name Caroline Martin
Testimony to EPA panel 7/26/04

I am coop board president at 366 Broadway. There are 37 residential units in the building containing approximately 20 children under the age of 10. To remind you, we had a whole building clean up that, due to visual inspection was deemed to have no WTC dust in the elevator shafts or ductwork. Consequently EPA did not clean the elevator shafts and ductwork.

In January, as a result of the building department violation we had our elevator shafts cleaned. I send a bulk sample of the dust to EMSL for $1000 worth of testing. These are the results:

See Attached

Unfortunately, having no education in chemistry, I have no idea what these results actually mean.

I have sent dust from our ductwork cleaning to Drs. Meeker and Lioy. I have heard nothing from them, so I am hoping this means there is nothing dangerous in the samples.

The point is that, as de facto building owner, I should not have to be making any of these sampling efforts. I should not be the one trying to understand test results the interpretation of which effect the health of over 100 people. This should be being done by experts, based on a real testing protocol, with real results.

The same is true of Deutsche Bank. I should not be the one trying to figure out what a 'building characterization' means to my health. Or wondering why Deutsche Bank's $33 million worth of testing is not sufficient to determine that the building is poisonous. Residents should not have to spend their time searching for information, sorting out conflicting test results, and worrying that yet again they and their health are just pawns in someone else's game.

Whereas most residents are not rocket (or other kind of) scientists, we were also not born yesterday! At this stage we expect to be lied to, and we are deeply suspicious. Strangely we still have a glimmer of hope that out there, or perhaps in here, there are experts on our contamination problems with the level of social conscience which will make them ignore their own economic or other conflicting interests and help protect us from the consequences of the WTC collapse.

Lead 15000 mg/Kg
Fibrous glass 1%
Chrysotile asbestos <0.1%
Mercury 1.63 mg/Kg
a-Quartz = 8.1% silica
PCB Aroclor 1016, 1221, 1232, 1242, 1248, 1260 all at 330 ug/Kg
PCB Aroclor 1254 1000 ug/Kg
Dioxin not detected in modified screening 'method 613' recommended
A list of 16 SVOAs all at 67000

TESTIMONY: JULY 26, 2004

Since the panel seemed galvanized by the presentation by 125 Cedar St. residents on the imminent demolition of Deutschebank, in verbal testimony I omitted the following opening paragraph:

On Friday we received the agenda for today's meeting which included three hours for discussion of a Sampling and Analysis Proposal for testing to take place at some vague point in the future. In a few weeks Deutschebank is scheduled for deconstruction. The deconstruction promises to be another environmental disaster in the making. We are grateful that a presentation on the subject will take place this afternoon but concerned that the panel did not initiate it. The demolition of Deutschebank should be given top priority by the panel which cannot argue, as EPA has about 9/11, that no one could have predicted it.

Also, as background to the presentation which the panel will be hearing from LMDC, you should know that their Environmental Impact Statement is a vague, noncommittal document. It commits itself only to 'investigating' remedies against the onslaught of pollutants the community is about to be subjected to. And in its 'investigation' into providing HEPA filters, for instance, for residential buildings and hotels, it overlooks the schools. Please ask LMDC to do more than 'investigate' remedial measures. They should actually implement them and they should include the schools.

Secondly in response to this morning's discussion on the fingerprint: I won't talk about the whole notion of a 'fingerprint' as I have made my views on the subject clear in the past. At this time I'll only say that I'm disturbed that the fingerprint will be based solely on samples taken close to the site. As a resident of Brooklyn, I'm not happy about such a fingerprint being imposed on us for whojm it may not be appropriate.

Since the panel lacks samples from Brooklyn, please bear in mind what happened after I found asbestos in my carpet and had an asbestos abatement performed by four burly guys working for twenty-two hours on a two room apartment. The apartment passed the AHERA test but some of the air tests showed that my son and I were still being exposed to a one in one thousand cancer risk. This is ten times higher than EPA was shooting for in Lower Manhattan.

Switching gears to health issues: I can't say everything I need to on that subject in the remaining minutes so here is some background: Stuyvesant High School reopened October 9. To reassure anyone who was worried about the air quality, Schools Chancellor Harold Levy moved his office to the school saying, "If I thought it was unsafe would I be here myself?" A freshwoman whom I shall call Anne told Levy she was worried about the air. Levy responded that if she transferred out of the school, she couldn't come back. Four days later Levy himself moved out later telling a t.v. interviewer, "Parents should worry instead about whether their children are wearing seatbelts and having safe sex." Did he mean at the same time? I don't know. You may be hearing at a later date what has happened to Anne.

Within a few weeks of the school's reopening, kids began getting rashes, nosebleeds, new-onset asthma, chemical bronchitis and chronic sinusitis. One girl who hadn't had asthma in seven years ended up in the emergency ward after swimming in the school pool which had not been cleaned. The mother of a boy who was on the football team said that her previously healthy son now carried two inhalers and was on medication that contained heavy doses of steroids. The father of another football player said that every night his son coughed himself to sleep for forty-five minutes.

To these and similar complaints Deputy Schools Chancellor David Klasfeld responded, "Some people are particularly sensitive. If your child is sick, we suggest you take him or her to the doctor."

We were also concerned about the high levels of Particulate Matter 2.5 which had been found at the school. Klasfeld, by his own admission a non-expert, said, "P.M. 2.5 is just another name for dust." An expert who had been brought in to address us said, "You don't have to worry about P.M. 10 because you cough it out and as for the really small particles, God willing, they just go right through you."

When high levels of lead were found in the school's ventilation system Klasfeld said it would stay in the walls. When asbestos was found in the auditorium carpet he said it would stay there.

As far as most government agencies were concerned, there was no problem. Reality, however, had other ideas. We cannot get an accurate picture of the health of Stuyvesant students since they are not unionized and so no study has been performed on them. But anecdotally even during the past two years, well after September 11, we continue to hear about more cases of new-onset allergies and asthma as well as pneumonia. Also, a NIOSH study performed in 2002 showed that approximately 60% of the teachers had had symptoms resulting from their exposure to the contamination of 9/11.

Jenna Orkin
World Trade Center Environmental Organization

national WRITERS union
UAW LOCAL 1981/AFL-CIO

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June 22, 2004

Dear EPA WTC Expert Technical Review Panel,

My name is Pamela Vossenas and I am a Vice-President of the National Writers Union, UAW L.U. 1981. I have worked in the field of occupational safety and health since 1987, working for unions, medical centers and public health organizations as a researcher and educator. As a former UAW International Representative assigned to the UAW's Health and Safety Department, I am familiar with community participatory research projects as recipients of NIEHS Hazardous Waste Worker funding. I am also a former vice-chair of the Southeast Michigan COSH. And so, I speak today as a firm supporter of the role of labor and community in defining and resolving public health issues.

The National Writers Union is seriously concerned about its members' health related to WTC exposures as either workers, residents or both. Our members include those: who reside in geographical areas around the WTC and in areas where the plume did travel to – Queens, Brooklyn and NJ and other areas in Manhattan and Long Island; and who worked and may continue to work, as either staff or as temporary workers – freelance writers, editors, etc in the same geographic areas of exposure. Also of concern is the health of our staff who work in our union hall that is located in NYC south of 14th St.

It is important to note that the U.S. workforce is increasingly becoming a contingent workforce, namely temporary workers, freelancers, day laborers, etc. This workforce includes a vast number of immigrant workers as well. Such a workforce must be targeted and included by the EPA as part of labor and the community that was exposed. Unfortunately, this is a population that regularly falls through the cracks due to the inadequacies of U.S. labor laws, employers and government agencies to address their needs and formally recognize their existence as part of the workforce.

Specifically, I would like to raise the following concerns regarding future EPA research and testing related to the health impact of the events of 9/11 in NYC and surrounding areas:

?? That labor and community representatives must have a seat on the panel;

?? That labor and affected communities must have a formal role in the panel by the use of Community Based Participatory Research as described by Micki Siegal;

?? That comprehensive environmental testing must include downtown residences and workplaces;

?? That the above testing includes a number of targeted substances and not just one substance as a surrogate for others;

?? That the EPA obtains environmental sampling data, currently the property of private entities or government agencies but not yet accessible to the public, labor and affected communities;

?? That vulnerable populations such as immigrant workers/residents and temporary/contingent workers be identified as target populations for
?? all outreach for activities related to the above items;

?? That materials be available in the languages of origin of the above populations;

?? That unions and organizations that represent the above-stated vulnerable populations be actively contacted by the EPA to inform their members of the work of this panel and any activities related to community research and testing;

?? That employers who hire temporary/contingent worker be actively contacted by the EPA regarding the testing of workplaces and the possible exposure of the workers they hired and sent to contaminated locations;

?? That the geographic area of study be expanded to include those outlying areas including Manhattan, Queens, Brooklyn and areas of NJ and Long Island which reflect where the plume traveled.

?? That all hearings of this panel are transcribed and made available quickly to the public.

Let us not forget that the increasing amount of construction occurring in the area of Ground Zero will only serve to aggravate the compromised respiratory conditions of workers and residents which are related to exposures from 9/11.

There is ample data to support the above concerns, all of which have been presented to the EPA already, repeatedly. It is time for the EPA to not only listen to labor and the community but take actions necessary to fulfill the EPA's responsibility to the public.

Our members' health and well-being depend on it. Thank you.

Sincerely,

Pamela Vossenas
Internal Organizing Vice-President
Acting Chair, National Health and Safety Committee
National Writers Union/UAW L.U. 1981

From Donna Heffernan:

I believe that every resident living below Canal Street since September 11th should be entitled to a free lung X-ray and free full body cancer testing.

TESTIMONY OF SUZANNE MATTEI OF SIERRA CLUB TO THE EPA WORLD TRADE CENTER EXPERT TECHNICAL REVIEW PANEL July 26, 2004

Good day. My testimony today will focus on the issue of lead contamination in World Trade Center dust. I have researched and participated in advocacy on childhood lead poisoning for about ten years. Many New York City children already suffer from the permanent brain damage caused by childhood lead poisoning because of exposure to lead-contaminated dust from old indoor lead paint. Generally, they become poisoned not from intact lead paint, but from deteriorated paint conditions that generate dust (unless the child is teething and the paint is on a protruding surface such as a windowsill). Unfortunately, residual World Trade Center dust presents a new lead contamination risk.

I am glad to see the disclaimer on the draft "Overview of Proposed Monitoring Program," stating that it does not represent EPA policy. To state that lead is "ubiquitous" in the indoor environment, as the document does on page 3, simply is not true. If it were true, the entire city, rather than certain neighborhoods, would be dubbed part of New York City's well-known "Lead Belt," where the greatest numbers of lead-poisoned children reside. In fact, the draft document itself reports that HUD has found only about five percent of the housing stock in the Northeast to have lead levels above the 25 micrograms per cubic foot benchmark. It is hard to imagine how a chemical could be called "ubiquitous" in the indoor environment if it does not appear above the benchmark in 95 percent of housing.

Lead clearly is a contaminant in much of the World Trade Center dust. An independent study identified lead in all 16 samples of indoor WTC dust taken in buildings close to Ground Zero just a couple months after the attack.[1] EPA itself reportedly found that nearly a third of the homes that it tested for dust had pre-cleaning lead levels that exceeded its cleanup benchmark of 25 micrograms per square foot. For example, EPA dust tests in one apartment at Tribeca Tower, located seven blocks from the WTC site, revealed pre-cleaning lead levels five times higher than the EPA guideline for its lower Manhattan cleanup, and other apartments in the building had elevated lead dust levels as well, even though the building itself did not contain lead paint.

The source of the lead in lower Manhattan dust tests is not certain in all cases, because lead-based paint in old buildings can generate such dust. Still, while some suggest that the lead dust found by EPA may not have come from Ground Zero, it is very likely that a significant amount of it did, based on the following facts.

First, New York City banned the use of lead paint inside housing and schools in 1960 -- much earlier than the rest of the country -- and the federal government also

1 L. Yiin and J. Millette, *et al.*, "Comparison of the Dust/Smoke Particulate that Settled Inside the Surrounding Buildings and Outside on the Streets of Southern New York City After the Collapse of the World Trade Center, September 11, 2001," *J. Air & Waste Mgt. Ass'n* 54:515-528, 519(2004).

banned its use inside housing nationally in 1978.[2] While some violations may have occurred during the early years after the ban, certainly buildings constructed in the 1980s and later can generally be presumed to be free of lead paint. Yet, test results of Ground Zero area buildings built in the 1980s or later have revealed lead dust.

Second, elevated levels of lead in indoor dust were found at Stuyvesant High School at 345 Chambers Street, a building that was completed in 1992.[3] While lead paint was improperly used in some schools through the early 1980s,[4] it is highly unlikely that it was still used in schools in the 1990s.

Third, while some have argued that lead dust could be tracked or blown in from pre-existing outdoor "ambient" sources, the chances of this occurring are small. The federal Department of Housing and Urban Development "HUD") has found generally that only four percent of homes with no interior lead -based paint contain lead dust hazards.[5] This is consistent with the findings of Dr. Lih-Ming Yiin and Dr. James Millette, who tested seven resident-provided samples of ordinary house dust gathered a couple months after the attack, and found that lead was not detected in any of them.[6]

Finally, I would note that lower Manhattan is not part of New York City's "lead belt." In recent years before September 11, 2001, Community District 1 has had comparatively low rates of childhood lead poisoning. The district ranks 36th among the City's 51 districts for childhood lead poisoning and 45th for severe childhood lead poisoning. By way of comparison, the Washington Heights neighborhood of upper Manhattan has nearly double District 1's number of lead poisoned children and ranks 7th in the City, behind neighborhoods in Brooklyn and the Bronx.[7] It is important to recognize that many apartments contain lead paint and yet do not contain lead dust hazards because the lead paint is well-maintained.

I urge care in making assumptions about contamination. I also urge that before making any decision to exclude lead from the testing protocol, this panel should consult with internationally known experts in childhood lead poisoning who are available right here in the City, including Dr. John Rosen of the Montefiore Medical Center and Dr. Philip Landrigan of the Mount Sinai School of Medicine.

Thank you for your consideration of these comments.

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2 N.Y.C. Health Code, 24 R.C.N.Y. § 173.13 and U.S. Consumer Product Safety Commission, 1977a, Banof Lead-containing Paint and Consumer Products Bearing Lead-Containing Paint. 44 *Fed. Reg.* 441i99 (Sept. 1, 1977), codified at 16 C.F.R. § 1302

3 *See* <www.stuy.edu/about/history.php>.

4 *See* Chancellor's Task Force on Lead Hazard Reduction, *Report on Lead-based Paint Policy Recommendations* (August 4, 1993), p. 1.

5HUD, *National Survey of Lead and Allergens in Housing* (Vol. I: Analysis of Lead Hazards)(April 18, 2001), p. 5-16.

6L. Yiin and J. Millette, *et al*., pp. 519 and 524. Although not necessarily a perfect system, they identified ordinary house dust as being characterized by a pH less than 7.0, a lack of glass fibers and a lsignificant percentage of biological materials.

7*See* analysis of City health department data by the New York Public Interest Research Group, *Do You KNow Where the Lead Is?* (June 13, 2002)(Tables 3 and 5).

SUMMARY OF MY STATEMENTS TO
THE WTC EPA TECHNICAL REVIEW PANEL
JULY 26, 2004
Michael R. Edelstein, Ph.D.

[This statement links comments made at three different points during the July 26 meeting].

The fundamental question for this panel is to answer the question, once and for all, "Is this community a safe place to live and work?"

This question requires careful scientific consideration. You must carefully weigh the list of potential methodological errors that would invalidate any conclusion you make. You must add to this list of errors the potential "Error of Public Communication and Trust."

Community trust was lost in the wake of the early disinformation from EPA and others. This history now creates doubt in what is known, the method needed to learn more, and the precautionary steps that people need to carry out.

The WTC disaster has shifted from an acute disaster to a chronic disaster.

And there is now a chance to change the prior dynamic and learn a new approach.

Given the history of distrust you face, your challenge is not merely to do good science, but to engage the community in sufficient depth that trust is reestablished and people believe in your results and conclusions.

This task is outside the boundary that most of you as scientists are accustomed to. It requires a delicate balance of how to carry out your task in order to gain credibility in two simultaneous cultures: science and the affected public. You also need to appease the politicians and officials.

We know from Adeline Levine's analysis of the Thomas Commission at Love Canal that internal dialogue amongst scientists, particularly where the results are subject to political interference, can shatter any authenticity otherwise attainable. To protect yourself against this, you need as much openness, transparency and input as you can offer. Your goal must be to avoid the "Error of Public Communication and Trust."

You must have a precautionary perspective in your work to achieve this goal. You must not only pay attention to finding the scope of the problems, but also to how they are to be addressed. This approach avoids what I call the "Mitigatory Gap" where a hazard is identified but not addressed.

In this instance, a new study has been proposed to further map the extent of contamination and to identify whether buildings have been cleaned. The approach is marred by certain assumptions and methods—how the buildings will be tested, the random sampling, the volunteer building solicitation. The net effect of these methodological challenges is to risk various errors, the most serious of which involve missing problems that still exist (i.e., dust sinks in HVAC systems and upper shelves that would be missed by passive and surface sampling; the fact that buildings likely to volunteer may show a bias toward those already having concerns and likely to have previously done cleanup, etc.). A random study that reveals contamination over a certain area will not help take steps toward addressing that contamination. If deposition is inconsistent for any reason, the grid may not adequately map it with precision. Finally, The boundaries of this study have been pushed northward to Houston. Yet, as noted in the meeting, there is still no clear idea about other areas of deposition—Brooklyn, New Jersey. Thus, even after the study's completion, legitimate concerns will remain. In short, the proposed study builds in sufficient error that invalid results and thus invalid communications about conclusions are assured. If you find little contamination, the public will be justified in doubting the results. If you find something, you will be forced to conclude that either more thorough study is required or that massive cleanup is needed.

So skip to "go." An alternative approach would involve the presumption that there is contamination within the original south of Canal boundary of Lower Manhattan. A two step plan is needed:

1. South of Canal, to restrict new dust sources through extreme controls and then to carry out a new thorough and thoroughly evaluated cleanup of all spaces.

2. Outside this zone, to carry out sampling to identify the extent of neighborhoods that also require a thorough cleanup.

Taking into account active monitoring and assessment of the Deutsche Bank and Fitterman Hall projects, as well as construction activities, these serious threats of new and re contamination must be controlled and monitored, or yet another cleanup will be required.

With regard to these deconstruction and construction projects, as well as the cleanup, the public requires active oversight to assure against new and re contamination and that living units are now safe. DEP or EPA monitors should be onsite at all times. A Citizens Action Committee should be formed to allow citizens to have input, information and oversight over hazardous activities. Regular meetings of the group will be open and all involved agencies will participate. The group will be financed and have leadership. This will empower the community to help prevent the contamination and recontamination they fear and to assure that cleanup is thorough. The community's interest, in this regard, is shared by all. I have experience setting up such entities and can provide detailed guidance.

Finally, with regard to the LMDC presentation. LMDC is poised to bring down 130 Liberty quickly, The community wants review and caution. The is sue is whether LMDC can move on this project without proper review. The LMDC DEIS was a generic study overviewing many projects. As a generic study, it does not replace the need for a site and project specific environmental review for any project that may have adverse environmental consequences. In fact, the use of a generic study as an umbrella implies the followup with project specific studies. LMDC appears to believe that its generic study ends its obligation to consider projects such as 130 Liberty's demolition. Unless the generic study contained a sufficiently detailed proposal for the demolition and review of the impacts, including a listing of needed mitigations, a project specific study is now required.

The stance of LMDC to push forward without carrying out the mandated review and inviting public participation simply illustrates how this community has been disempowered and justifies the apparent lack of trust in the protectiveness of public actions with regard to residents and workers. LMDC, much as the EPA Technical Review Panel, must strive for public trust.

Michael R. Edelstein, Ph.D. is Professor of Psychology at Ramapo College of New Jersey, where he heads the Environmental Studies Program. He is also President of a non-profit, tax exempt organization, Orange Environment, Inc. He is the author of several books, including Contaminated Communities: Coping with Residential Toxic Exposure, 2nd Edition. Westview Press, 2004.

Revised Statement for the fifth meeting of the EPA WTC Air Quality Expert Technical Review Panel, July 26, 2004

I am Rachel Lidov, a member of 9/11 Environmental Action. I would like to express my appreciation for the question and answer period. Since I would like answers to questions we have asked before, I will try to be brief, .

I remind you that the public record only tells us that the Council on Environmental Quality, suggested the EPA this Technical Expert Review panel outside the realm of established regulatory procedure, practice and enforcement; and that Senator Clinton's office was closely involved. We are told this was a carefully thought out process. But the criteria that confined the role of the community to a single ex-officio "liaison" member remain a secret.

So we ask again: how were the members of the panel chosen, and to what extent was the CEQ was involved in these choices? On what basis were excluded from this Panel Drs. Levin and Herbert of the Mount Sinai Center for Occupational & Environmental Medicine, whose experience in screening and testing for the respiratory ailments that have occurred from exposure to the World Trade Center contamination is unparalleled? Why is a community of so many residents, workers, students and volunteers under-represented?

The demolition of the Deutsche Bank is about to begin, and the records of the studies done on the building, and the plans for is deconstruction are unavailable to the public. Funding for additional technical experts was just criticized by a panelist. But how can we forestall further harm to the public when we cannot even be adequately informed on the public health dangers involved for those already sensitized? Dr. Joan Reibman, of NYU Hospital, whose knowledge of the ailments affecting the residential population is unequalled, has been excluded from today's presentations. Dr. Maggie Clarke was just cut off by the Panel's Chair. We must ask again: who influences the final decisions about the operating procedures of this Panel? Why is the community with its unequalled experience and three years in the field so often humiliated?

I recently discovered that the summary reports and the documentation of public testimony on the EPA web site are not simply incomplete, but that some of the latter has even been removed. While both panel members and commentators have requested transcripts of all meetings and conversations be made available, I cannot find that this has been done. We ask again: when will you provide a complete public record?

So finally, we ask again: what is the budget for this Technical Review Panel, which is charged with no more than making recommendations? Are the funds sufficient for timely postings of the public record on EPA's web site? What funds are you told will be provided for actual testing for contamination, cleanup of contamination, and for screening and treatment of the victims of the contamination? Will you be funded to monitor the cleanup of Deutsche Bank and Fitterman Hall?

As we approach the third anniversary of the destruction of the World Trade Center towers, we also come nearer to third anniversary of the weeks when the EPA deceived the public about the dangers they faced in continuing to live, work and study in Lower Manhattan. Against today's backdrop of revelations about the EPA's negligence when it is charged to uphold and enforce measures to protect human health, or about Homeland

Security's ineffectual approach to the threats posed by terrorism, we still hear only the relentless ticking of the clock. .

I will close with a final request, or suggestion. As grateful as I am for your increasing respect for what the public freely offers and for your accepting the corrections we make after nearly three years of "field work", I am fearful that the Panel's six month anniversary will mark no real progress in correcting the errors of the past. It is time for some answers to these questions, and in view of the late hour, they should be first on the agenda for the September 13th meeting.

Thank you.

Speaker: Marc Ameruso

COMMUNITY BOARD #1 MANHATTAN
RESOLUTION

7/26/04

DATE: OCTOBER 15, 2002

COMMITTEE OF ORIGIN: QUALITY OF LIFE

BOARD VOTE: 31 IN FAVOR 1 OPPOSED 1 ABSTAINED 0 RECUSED

RE: **Deutsche Bank Building**

WHEREAS: The Deutsche Bank was severely damaged in the WTC 9/11 attack and the physical structure now is contaminated with mold and contains various toxins and there are broken windows open to the elements, and

WHEREAS: It appears that the structure will have to be dismantled, now

THEREFORE BE IT RESOLVED THAT: Community Board #1 calls upon the EPA and DEP to step into the process and use their emergency powers to expedite this process immediately in accordance with EPA and DEP guidelines because of the threat to the environment and people's health in the surrounding area, and

BE IT FURTHER RESOLVED THAT: The EPA and DEP immediately monitor the toxic levels in the building and instruct the owners of the building to clean the exterior, cover the building completely so that the broken windows are covered and inform the various agency and health organizations of the results so they can take whatever action is necessary, and

BE IT FURTHER RESOLVED THAT: The plan for dismantling the building come before the Community Board before it is implemented.

12res.oct15

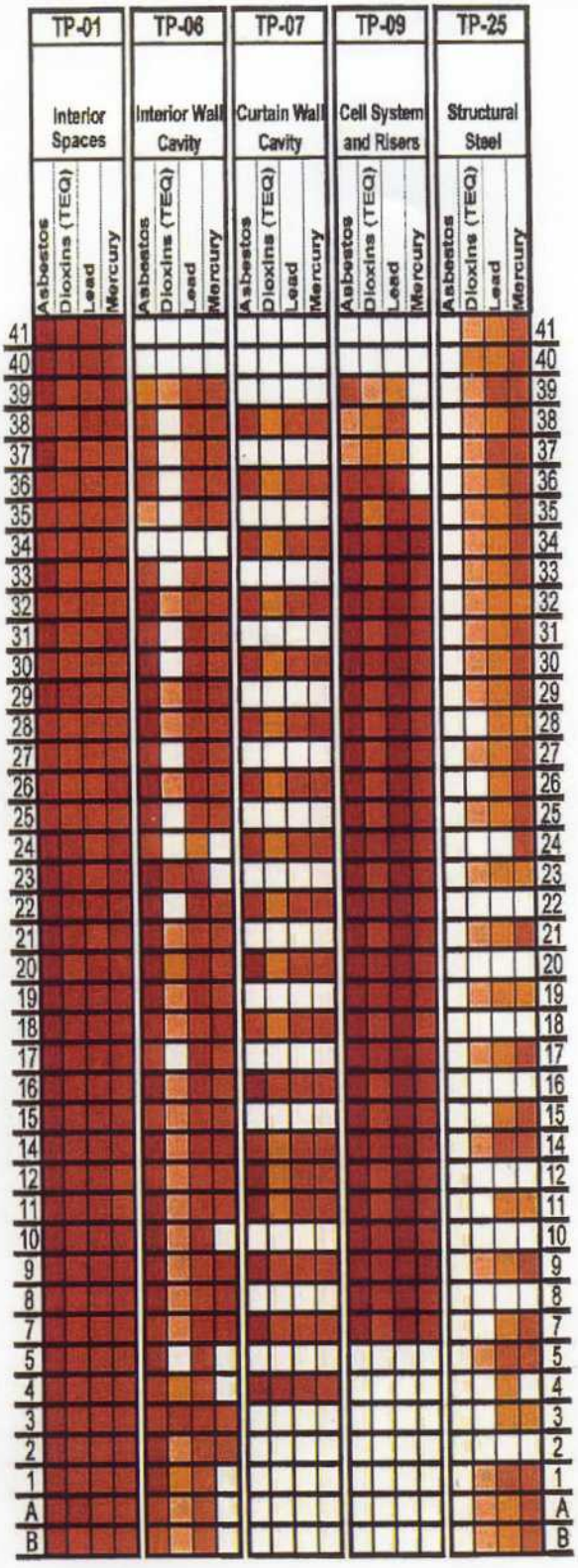
EPA

Source: Carte Jenkins

Speaker: Marc Ameruso

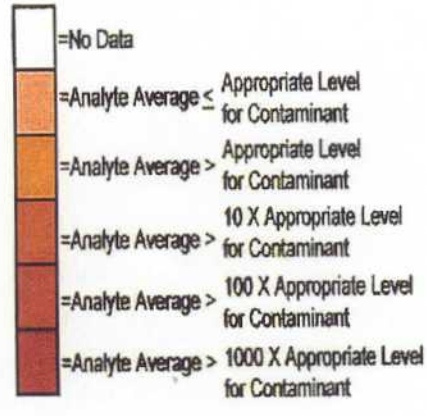
Summary of Average Analyte Concentration Relative to Appropriate Levels for Contaminants by Floor and Test Protocol

7/26/04



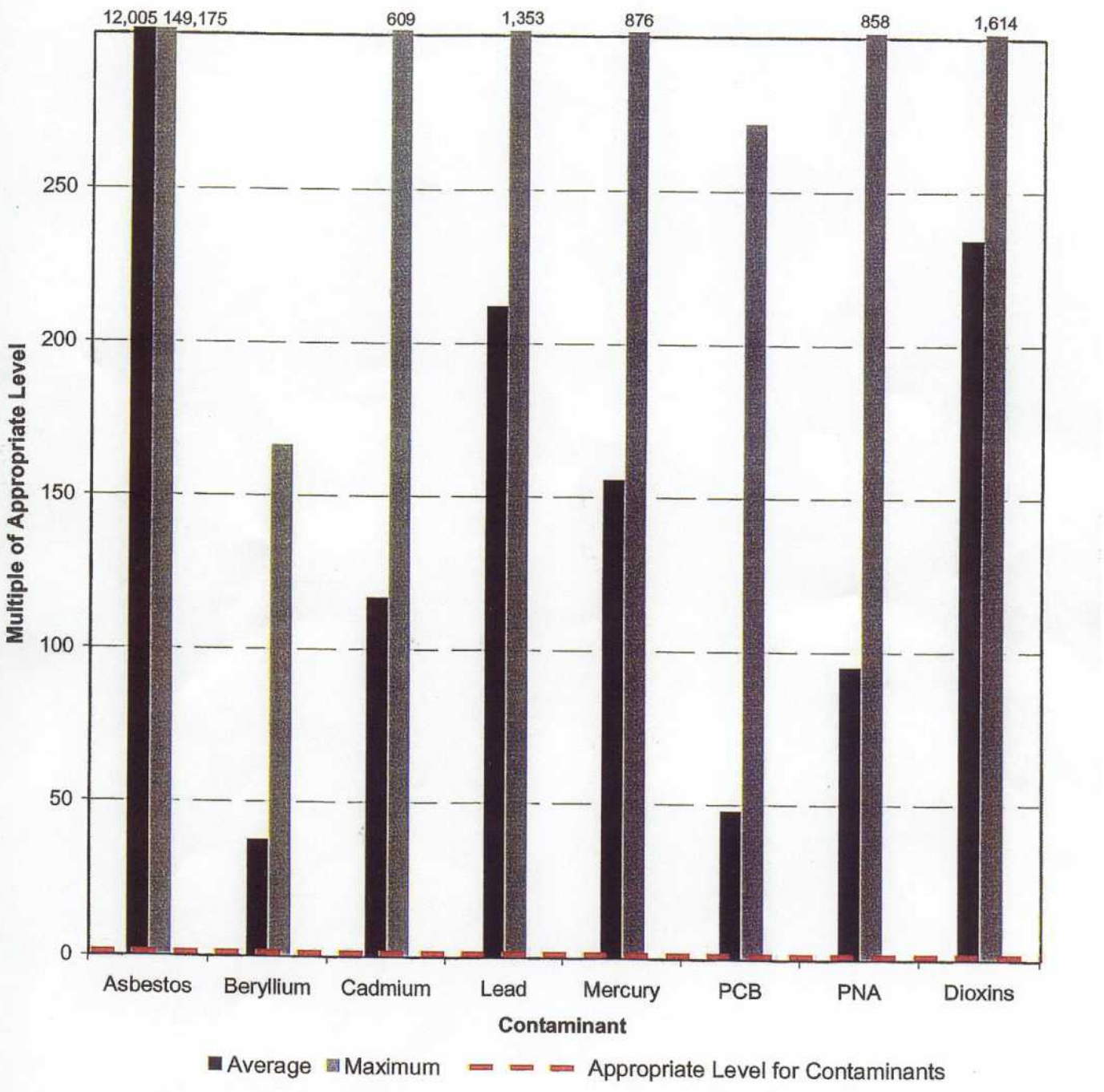
Summary

Analyte	Appropriate Level for Contaminant Wipe Samples
Asbestos	156 s/cm^2
Dioxins (TEQ)	0.25 pg/100 cm^2
Lead	1.82 µg/ft^2
Mercury	0.011 µg/ft^2



Speaker: Marc Ameruso
7/26/04

TP-01 Contaminant Concentrations[1]



(1) The appropriate level of each WTC Hazardous Substance is one in the chart above.

STATEMENT OF ROBERT GULACK, UNION STEWARD, U.S. SECURITIES & EXCHANGE COMMISSION, BEFORE THE EPA TECHNICAL PANEL

FOR IMMEDIATE RELEASE
July 26, 2004

FOR MORE INFORMATION, CONTACT:
Robert Gulack, (201) 794-9322

As this panel may recall, my name is Robert Gulack and I am here as a union steward representing the SEC bargaining unit in New York City. As we approach August, it is an appropriate time briefly to review the context in which this panel has done its work, what has been accomplished thus far, and what needs to be accomplished prior to Election Day, if this panel is to maintain any credibility in the eyes of the voters.

I will begin with the context. We now know – as was reported a week ago in the *New York Post* – that the EPA had, in their possession, hard scientific proof that the air in New York City was dangerous when they told everyone it was safe. The EPA now attempts to rebut this charge by saying they were averaging the exceedances, but that's not what they told the public at the time. At the time, they simply said the air was safe. Even on D-Day, there must have been brief moments when bullets were not whizzing past. I can just see the EPA there on Utah Beach, averaging the Nazi bullets against the empty air and declaring the beach, *on the average*, safe for children.

The history of EPA's interaction with this panel can only be interpreted in the context of the previous two and a half years in which the EPA first lied about the data, and then brushed off the report of its own Inspector General, and the pleas of Sen. Clinton and Cong. Nadler. What, in fact, have we been doing since March 2004?

First, the EPA wasted April trying unsuccessfully to persuade this panel that there was no need to test for anything beyond asbestos. This panel wisely dismissed that foolish suggestion.

Second, the EPA wasted May and June trying unsuccessfully to persuade this panel that comprehensive testing could not begin until an alleged WTC signature had been established. This panel wisely dismissed that foolish suggestion, noting that comprehensive testing could be pursued concurrently with signature research, and would only make the proposed signature research that much more reliable.

Third, in July, the EPA held off providing its testing proposal until 4:30 PM on the Thursday prior to this meeting, allowing little time for rebuttals and critiques to be prepared. The EPA wants to have expert advisers, but it does not want to hear their expert advice. The EPA proposal quite arbitrarily leaves out lead and dioxins, insists on only passive and voluntary sampling, and fails to name as an objective reducing surface levels of asbestos, for example, to at least pre-attack levels. Why can't we test for lead, for example, and use the signature to tell us where the lead came from? Why can't we use aggressive testing, and put legal and public pressure on landlords to cooperate? This

weak-kneed and watered-down proposal could have been discussed March 31st. We could have fixed it up and had the results by now.

One would have thought, after the last five months, that the EPA would have realized by now that it cannot bulldoze this panel. Despite its best efforts, the EPA has never been able to bully this panel. Despite its best efforts, the EPA has never been able to manipulate this panel. It must be admitted, however, that the EPA has succeeded in stalling this panel.

For five months, the EPA has wasted everyone's time, forcing this panel to tread water while more and more innocent children have suffered permanent lung damage. I don't know what these children could have done to George W. Bush, to make him treat them with such cruelty. I do know that the person George W. Bush once named as his favorite philosopher told us, "It is not the will of your Father in heaven that one of these little ones should perish." And, you know, one of the first proven medical effects of this World Trade Center contamination has been the negative impact on fetal birthweights. In any other context, this President would be jumping up and down to protect these fetuses. He would be declaring they were human beings with legal rights. But when it comes to calling off al-Qa'ida's continuing chemical attack, George W. Bush has turned his back on both the born and the unborn.

Now, having wasted all this time, the EPA is planning to send you all off for August recess without any plan to do any testing whatsoever prior to Election Day. This EPA scheme puts this panel in a terrible position. Rightly or wrongly, fairly or unfairly, if this panel does not insist on preliminary screening tests being carried out in office buildings, schools, and firehouses, with the results available prior to Election Day, this panel will be seen – correctly or not – as collaborating in the EPA's continuing cover-up. This panel will be perceived – whether or not it is justified – as allowing the EPA to put off any testing until after the voters have gone to the polls.

We are at war. This is an election year. There can be no issue more important in the upcoming election than giving the voters the facts concerning the continuing harm to New York City resulting from the sneak attack on September 11th. There can be no excuse for denying the voters the facts. Our duty to our country demands it. Our duty to the cause of democracy, both in this precious American experiment and around the world, demands it. Our community cries out to you for testing. Our elected representatives cry out to you for testing. But more than that, the voice of every patriot who ever died for American democracy cries out to you for testing. If no tests are done prior to Election Day, history will judge every person in this room – will weigh us in the balance and find us wanting. "We cannot escape history. We will be remembered in spite of ourselves. The fiery trial through which we [have] pass[ed] will light us down in honor or dishonor to the latest generation. We, even we here, hold the power and bear the responsibility." Thank you.

The Civil Service Employees Association Testimony

for the EPA World Trade Center Expert Technical Review Panel

July 26, 2004

St. John's University
101 Murray Street
New York City

Testimony of
Komilla John, CSEA OSH Specialist, Area 1
Civil Service Employees Association
Local 1000 AFSCME, AFL-CIO
143 Washington Avenue
Albany, NY 12224
(518) 257-1000 • 1 (800) 342-4146

Good morning. My name is Komilla John and I am the Occupational Safety and Health Specialist for CSEA in New York City. I would like to thank the Panel for giving me the opportunity once again to testify about continuing concerns of CSEA members slated to be relocated to 90 Church Street. In spite of the unprecedented magnitude and seriousness of the safety and health concerns as a result of the 9/11 disaster, I am amazed at the minimum effort put forth by the state government to acknowledge and identify vital issues relating to building contamination. I will highlight the glaring concerns that CSEA has been struggling to address in regards to the US Post Office building located at 90 Church Street.

- 90 Church Street US Post Office Building is on the northeast corner of the World Trade Center site. It is also in proximity to Deustche Bank Building and Fitterman Hall, both heavily contaminated. The proposed demolition of Deutsche Bank generates concerns for the release of harmful contaminants, so that the necessary precautions and protocols to alleviate these concerns must be ensured. Fitterman Hall remains under investigation but its rebuilding or demolition should be held to the same standard.
- The 90 Church Street building was supposedly 'cleaned thoroughly' by property managers. No independent regulatory agency supervised the cleaning. As a result CSEA has to rely on documents provided by the state's privately contracted consultants. We literally had to pry sampling results from the state; results that should prove to us that our members will be safe working in the building. Sampling data that CSEA has received so far leaves many questions unanswered as to the extent to which the building was gutted and cleaned.
- CSEA was provided with clearance sampling results that showed in some instances levels of contaminants up to 50 times the clearance levels recommended by the US Housing and Community Development (HUD) guidelines. Requests for clearance results showing lower levels of contaminants are being addressed **now** after the lease for occupancy has been signed.
- CSEA was not provided with clearance results on numerous parts of the building. In particular, CSEA has no data that indicates that the Air Handling Units and the HVAC system in the building was cleaned properly. Conflicting sources claim that the whole

HVAC system was replaced, encapsulated or upgraded. Requests for clarification and complete responses to our questions are still unanswered.

- Lack of any standard for cleaning or identification of contamination has resulted in a competitive match up of experts and consultants between the unions and the state government. Labor unions like CSEA express concern and the state government rebuts by issuing a blanket statement claiming 'everything was thoroughly cleaned.' Walkthroughs conducted by various unions reveal that the building was not completely gutted or cleaned.
- Numerous windows were shattered during the disaster. CSEA had to convince the state that the future construction projects for the WTC site would generate substantial amount of dust, welding fumes and other health hazards so that double paned windows should be installed.
- The air monitoring and environmental testing protocols for this building as well as all other buildings in this area of Lower Manhattan must be designed to measure all possible contaminants in this area. Regular or standard testing protocols are not adequate.
- After verification, testing and monitoring data for this building as well as other buildings must be immediately available to involved parties. The data should not be filtered. Any building suffering from dangerous levels of contamination affects not only the occupants of that building but the occupants of surrounding buildings.

Thank You,

Komilla John, MPH-IH
OSH Specialist, CSEA, INC.
Area 1

Comments of Indira Singh

Lower Manhattan Resident and Worker
66 Pearl Street, Apt. 508
New York, NY 10004

EPA Panel Hearing
July 26, 2004

"My name is Indira Singh. I am a resident of 66 Pearl Street, which is located approximately 700 yards SSE in a direct line of the plumes from the collapsed towers.

I presented testimony to this panel through a colleague of mine at the first hearing on March 31st, 2004.

I stated then it was not helpful for the EPA to deny our toxic conditions; that lying about the true situation encourages others with financial incentives - such as landlords and insurance companies - to also lie about the toxic conditions of their property to existing and prospective residents.

For the record, the property manager of 66 Pearl Street began denying the reality of the toxic conditions in the building immediately after 9/11. In November of 2001 the managing agent stated to me that she had "never heard of a dust condition" in Lower Manhattan. She referred to the EPA's September and October and November 2001 statements claiming air quality was fine. As a result, in November 2001, I added my voice to community action to implore the EPA to stop this nonsense.

In May 2002, nine months of blistering community and local political action finally forced a EPA into a grudging reversal of their 9/11 position, and admitted the air quality was bad and they agreed to a limited cleaning of our apartments.

A one-time cleaning was performed on the ducts and vents to my building and my apartment. Note, this was a one time cleaning, and only to the ducts; the actual apartments within my building were never professionally cleaned. This was because the EPA did not mandate cleaning of the actual insides of the apartments.

As I testified in March 31, 2004, after detoxification programs and medical interventions, my doctors stated it was their opinion my apartment continued to make me sick. This is because when I return to my apartment my WTC symptoms worsen, and when I remove myself from the environment my symptoms subside to a baseline level. They advised me to leave immediately.

Based on these medical statements in June and July of 2004 my lawyers engaged the services of an environmental scientist in Lower Manhattan to test my apartment.

After 20 minutes in my apartment, this expert stated to me: You know Indira, I have tested many apartments in Lower Manhattan since 9/11. But what's

interesting about yours is that some two and a half years later, you still have the original 9/11 dust here.

That statement validates what the doctors have been telling me all along.

That statement – my apartment still has the original 9/11 dust - along with what my doctors have been stating – shows that the EPA was lying and is still lying about 9/11 toxins and contamination in Lower Manhattan. Those EPA lies and the EPA cover-up demonstrate the EPA's complete and total contempt of the health of the residents, and specifically my health.

Why my apartment still has the original dust, where that dust is, what it is composed of and which entities I intend to hold financially and hopefully criminally responsible are matters that are in the hands of at least three lawyers at this point.

What I will offer the EPA, if they want to sample the dust in my apartment for their purposes, they can buy it from me on e-Bay.

The Director of Pulmonology of Bellevue has stated one characteristic of the poor air quality in Lower Manhattan is the Ph. The Ph of the air due to contaminants was an unbelievable level of 13. She said this was the equivalent of breathing lye, or Drano. She said this would burns or scar lung tissue as mine have been. Those who do not have asthma have RADS, reactive airway disease syndrome, a disease of the small airway structures. Being exposed to poor air quality for 1,000 days pretty much means I'll never get my lungs back.

Members of the panel please listen to the following:

- The patterns of EPA lies and cover-up for the past 1,000 days have been proactively coordinated and politically defended by this administration.

- The financial incentives of a few powerful stakeholders play a definitive role in the pattern of EPA lies and cover-up. It is therefore time to investigate whether the EPA's actions fall within the definition of some form of racketeering, civil or criminal.

Today almost 1,000 days after 9/11, I have no reason to change my early characterization of the EPA as having the moral ethics of terrorists.

Here are two more reasons why:

I have tried to discuss my situation with representatives of the EPA. Instead of engaging in helpful dialogue they parrot EPA public relations oriented denials. When pressed for more informative answers to hard questions, they resort to a

bizarre and defensive repetition of the statement: "I am proud to work for the EPA".

The EPA's position on air quality – other than being an obscene gesture to residents – is one landlords waste no time in copying. Just last week my landlord's agents came poking around my door so I invited her to enter and view the contamination first hand. She told me "You have lost your mind."

Community action, political action, individual and broad-based lawsuits – nothing has changed the EPA's fundamental attitude toward the devastated area of Lower Manhattan. Specific lawsuits such as mine may change my situation, but the loss of Lower Manhattan – and by that I mean the conversion of Lower Manhattan into a toxic residential ghetto – is well underway.

Metaphorically speaking, nothing short of ripping this administration's collective lungs out will change this from happening, but that will only happen when people wake up. I pray that event is fast approaching. When it does, I also pray none of those responsible in the EPA, or their corporate and political masters escape our justice.

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New York City Department of Environmental Protection
Bureau of Environmental Compliance

Monitoring Contractor
Scope of Work for 125 Cedar Street, Manhattan

Background

A follow-up visit to 125 Cedar Street revealed debris and significant dust accumulation present on surfaces throughout the interior of the building. The interior cleaning is to be accomplished by a licensed asbestos abatement contractor and monitored by a Monitoring Contractor.

Purpose

The Monitoring Contractor shall provide personnel experienced, trained, and certified in environmental sampling and asbestos air monitoring to be on-site, full-time, during work area preparation and cleaning phases of building interiors (12 stories and a penthouse-5,000 to 6,000 square feet in total). The Monitoring Contractor shall provide qualified staff to observe the work, conduct air monitoring, and monitor the cleanup of the building interiors to ensure compliance with the project specifications and appropriate regulatory requirements. The Monitoring Contractor shall provide clearance sampling and analyses.

The Monitoring Contractor shall provide qualified staff to collect samples for lead, polyaromatic hydrocarbons (PAHs), dioxin, fibrous glass, crystalline silica and mercury.

An accredited laboratory shall perform all sample analyses.

The Work shall be performed 24 hours per day, seven (7) days per week

Air Monitoring/Construction Inspection Services

Air monitoring by a Monitoring Contractor shall be conducted during all cleanup activities. The Monitoring Contractor shall provide individuals certified as project monitors and air sampling technicians to perform daily air sampling and inspections from the commencement of the project through final air clearance sampling. The Monitoring Contractor shall provide sufficient equipment and experienced personnel to monitor work area preparation and cleaning phases of the building interiors.

Qualifications

Project Monitoring

The Project Monitors must posses valid NYS Asbestos Project Monitor certificates. Monitors must have served as a third party project monitor on at least 25 asbestos abatement projects. Project Monitor must have performed final clearance inspections on at least 25 asbestos abatement projects. A single individual with Asbestos Project Monitor and Asbestos Project Sampling Technician certification shall not perform the functions of both Monitor and Technician during this project.

Air Sampling Technicians

Air monitoring technicians must posses valid NYS Asbestos Project Sampling Technician (APST) certificates. Technicians must have performed air sampling for at least 6 months. At a minimum at least 5 Air Sampling Technicians must be assigned to this project. A single individual with Asbestos Project Monitor and Asbestos Project Sampling Technician certification shall not perform the functions of both Monitor and Technician during this project.

Wipe Sampling Technicians

Wipe sampling technicians must have 1-year experience in wipe sampling for a variety of contaminants and have received state certified training in dust sampling. At a minimum at least 2 Wipe Sampling Technicians must be assigned to this project.

Equipment

Sampling equipment must be in sufficient quantity to provide the amount and type of samples required for this project. At a minimum the following equipment are required: air-sampling pumps with flow rate capacities of 2 to 10 liters per minute, tripods, rotometers, sample cassettes with mixed cellulose ester filters having pore size of 0.8μm, micro vacuum, disposable porous cellulosic towellettes moistened with wetting agent and solvent-wetted sampling agent.

Analytical Laboratory

The environmental laboratory must be certified by the New York State Department of Health. Certification for all the analytes specified herein must have been maintained for at least six (6) consecutive proficiency testing rounds. The laboratory must possess a gas chromatograph equipped with a capillary column and high-resolution mass spectrometer for analyzing dioxin and inductively coupled plasma for total metals. Cold Vapor Method apparatus shall be used for mercury analysis.

Proof of qualifications must be presented to the NYCDEP prior to commencement of work. The NYCDEP reserves the right to disqualify any individual(s) from work on this project for non-compliance with these specifications or the requirements of applicable rules and regulations.

Specifications

It is anticipated that the work will be completed within three (3) weeks.

Sampling and Analytical Procedures for Lead, PAHs, Dioxin, Fibrous Glass, Silica, and Mercury

1. Sampling for lead, PAHs, dioxin, fibrous glass, crystalline silica and mercury shall be performed by the wipe sampling technician. A completed chain of custody must accompany all samples. A unique sample number shall be assigned to each sample. A complete written description and/or diagram shall clearly identify each sampling location.

2. Post cleaning air samples for fibrous glass and silica shall be collected concurrently with the asbestos clearance air sampling procedures specified herein. Five samples for fibrous glass and one sample for silica shall be collected in each apartment.

3. Wipe samples shall be collected before and after cleaning for lead, mercury, dioxin, and PAHs.

   Prior to the cleaning activities, three wipe samples shall be collected for each of these parameters in each apartment. The sampling locations shall be a wall, a bare floor, and a counter or tabletop.

   After cleaning activities, three wipe samples shall be collected for each of these parameters in each apartment. The sampling locations shall be a wall, a bare floor, and a counter or tabletop; preferably at the same location as the pre-cleaning samples.

4. The required sampling and analytical procedures are specified in Table 1.

Table 1: Sampling and Analytical Methods

Parameter	Description	Sampling Methodology	Analytical Method
Lead	Wipe samples	HUD Appendix 13.1	EPA Method SW-846-6010B
PAHs	Wipe samples	ASTM D6661-01	ASTM-6661-01 EPA SW-846-8270C
Dioxin	Wipe samples	ASTM 6661-01	ASTM 6661-01 EPA Method SW-846-8290
Fibrous Glass	Air samples	NIOSH 7400	NIOSH 7400, Counting Method "B"
Crystalline Silica	Air samples	NIOSH 7500	NIOSH 7500 (XRD)
Mercury	Wipe samples	HUD Appendix 13.1	EPA Method SW-846 7471A

Asbestos Air Sample Collection and Analysis

1. All asbestos air samples collected during clean-up activities shall be analyzed via TEM. The method of analysis and sampling methodologies shall be in accordance with the applicable sections of Title 15, Chapter 1 of the Rules of the City of New York. and AHERA.

2. A turnaround time of 24 hours is required for all samples.

3. Asbestos clearance air samples shall be analyzed in accordance with the NIOSH 7400 Method, and analyzed by PCM followed by TEM. The laboratory shall report a PCMe value of all fibers greater than 5 microns in length. Therefore, the lab shall report PCM, TEM and PCMe values for each sample.

Asbestos Air Monitoring

1. At a minimum, five (5) TEM samples shall be collected per day during cleanup activities.

2. Samples shall be collected at isolation barriers outside the work area, the clean room of the worker/waste decontamination facility, and outside of the building.

3. Sample collection during clean up activities shall be in accordance with Title 15, Chapter 1 of the Rules of the City of New York (RCNY) and AHERA regarding documentation, sample locations, rate of flow, and required volumes to achieve the necessary analytical sensitivity.

4. Sampling equipment shall be placed at representative locations and away from obstruction. Sampling cassette must be placed on a tripod and not taped to existing surfaces. All air sampling equipment shall be pre- and post- calibrated to insure accurate air sampling volumes.

5. The Air Sampling Technician shall perform clearance air sampling after the areas are free of dust accumulations as determined by the Project Monitor. All surfaces must be completely dry prior to the start of sampling. Clearance air sampling shall be performed at each apartment. Five samples shall be collected in each apartment and two samples shall be collected in each common space. The elevator shaft and first floor commercial spaces shall be cleared separately. Clearance air monitoring shall be performed after the completion of **all** clean up activities at the work site. Clearance air sampling shall be aggressive and performed in accordance with Title 15, Chapter 1 of the RCNY Section 1-43 (a)-(d).

6. Clearance air samples shall be collected in accordance with the procedures specified in the NIOSH 7400 Method. The flow rate for collection of air samples shall be at least 10 liters per minute and no more than 15 liters per minute. Air sampling cassettes must be monitored to ensure the filters do not develop dark spots that would indicate clogging. The minimum sampling volume is 3600 liters. If clogging develops, the cassette must be changed.

7. All clearance air samples and completed chain of custody forms must be transported to the laboratory immediately after sampling is completed.

Clearance Criteria

1. The following clearance levels have been established by the USEPA for clean up activities resulting from the collapse of the WTC.

Parameter	*Clearance Level*	*Note*
Asbestos in air	0.0009 f/cc PCMe	Primary clearance level
Lead in settled dust	<25 $\mu g/ft^2$	Primary clearance level
Dioxin in settled dust	<4ng/m^2	Primary clearance level
Fibrous glass in air	<0.01 f/cc	Secondary clearance level
Crystalline silica in air	0.5$\mu g/m^3$	Secondary clearance level
PAHs in settled dust	<0.3 mg/m^2	Secondary clearance level
Mercury	between 1 and 2 mg/m^2	Secondary clearance level

2. Cleaning shall not be considered compete unless the primary clearance levels are achieved. The apartment will be re-cleaned and retested if the primary clearance levels are not achieved. These clearance levels may be re-evaluated and revised if determined necessary based on field conditions and analytical limitations. Secondary clearance levels shall be considered in determining the need for additional cleanup, however failure to meet the secondary clearance levels does not automatically trigger the re-cleaning.

Project Monitoring

1. The project monitor shall provide oversight of clean-up activities to ensure compliance with project specifications, tenants authorizations, and applicable rules and regulations. The project monitor shall be present on site during all cleaning activities. The project monitor shall coordinate all scheduling requirements for timely completion of the work (completion of work area preparation and cleaning activities within three (3) weeks. The project monitor shall maintain the inventory of valuable items in each unit as provided by tenants. A copy of the contractor requirements is attached. For additional and specific tasks, refer to this attachment.

2. The project monitor shall provide daily monitoring of all work activities to insure compliance with the scope-of-work, the applicable rules and regulations, and the contracts. This includes but is not limited to the verification of worker certification status, the use of proper engineering controls and appropriate work practices.

3. The project monitor shall direct corrective actions when appropriate and shall be responsible to stop work until corrections are made. Findings must be reported immediately to DEP via telephone call. Written notification of observation and corrective actions must be received by the DEP within 48 hours of telephone call.

4. A final report shall be submitted to the DEP within days of project completion. The report shall clearly identify the work performed in each unit and shall include all laboratory reports, chain-of-custody forms, field notes, copies of employee credentials (i.e. certificates), tenant and owner authorizations, etc.

U.S ENVIRONMENTAL PROTECTION AGENCY, REGION II
NEW YORK RESPONSE AND RECOVERY OPERATIONS
290 BROADWAY
New York, NY 10007

Mike Gilsenan
Assistant Commissioner
New York City Department of Environmental Protection
59-17 Junction Boulevard
Flushing, New York 11373-5108

Dear Mr. Gilsenan:

Please find a summary of our evaluation of the analytical data from 125 Cedar Street presented below.

A review of the analytical data for asbestos, polycyclic aromatic hydrocarbons (PAHs), dioxin, lead, mercury, fibrous glass, and silica indicates that the numeric criteria we are using in the Confirmation Building Cleanup Study ("the pilot") at 110 Liberty Street have been met. The numeric criteria are listed in a draft report entitled "World Trade Center Indoor Air Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks", which is currently in draft form and is undergoing a peer-review.

If you have any questions, please do not hesitate to contact me at 212-637-3116 or Charles Nace of my staff at 212-637-3459.

Sincerely,

Kathleen Callahan

Kathleen Callahan
Assistant Regional Administrator for
New York Response and Recovery Operations

Enclosure

cc: Ellen Gesmer, Esq.

Summary of the Analytical Results for the Chemicals of Potential Concern

USEPA's review of the analytical data for samples collected from 125 Cedar Street indicate that the areas sampled meet the numeric criteria established in the draft "World Trade Center Indoor Air Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks" report (i.e., COPC document). The COPC document was created by a committee with representation from federal, state, and city government and was designed to establish numeric criteria to be used in addressing potential contamination from dust and combustion by-products associated with the World Trade Center collapse and fire. This document is currently undergoing peer-review. The data which was evaluated consisted of pre-cleaning and post-cleaning samples for six chemicals, asbestos, polycyclic aromatic hydrocarbons (PAHs), dioxin, lead, fibrous glass, mercury and silica. For some chemicals all of the pre-cleaning samples were below the established numeric criteria, such as dioxin. In addition, some of the post-cleaning samples exceeded the numeric criteria for several chemicals, such as asbestos. These areas (i.e., an apartment or common space) required additional cleaning and subsequent re-testing. An area was not considered to be cleaned until all the numeric criteria for each chemical was met. All of the areas tested met the numeric criteria for each chemical prior to performing the walk through inspections that occurred on November 07 and 08, 2002. Below is a summary of the analytical results for each chemical.

Asbestos – We reviewed approximately 143 asbestos analytical results that were analyzed using Transmission Electron Microscopy (TEM) performed using EPA 40 CFR Part 763 Final Rule (AHERA), which had a detection limit of either 0.0009 f/cc or 0.0008 f/cc for fibers greater than or equal to 5 μ. Based on these analytical results, eight samples in six units/spaces exceeded our clearance criteria of 0.0009 f/cc. These units/spaces (5S, 5N, 3N, 9N, staircase between 7 & 8, and the 6th floor hallway) were recleaned and then retested using the analytical method identified above. Several additional spaces (8S, 7N, 7S, 7th floor laundry room) were also recleaned and retested because asbestos was detected and the initial detection limit was set very close to the clearance criteria. It should be noted that these areas met the numeric criteria, however to provide additional confidence in the data, it was recommended that the 4 spaces be recleaned and retested. The detection limit was lowered to 0.0004 f/cc for subsequent testing. All of the 43 samples collected during the retesting met the numeric criteria after the second cleaning. An additional set of data, 30 samples, was received for four units (2N, 9S, 8N, and 3S). This data indicated that two units met the numeric criteria (9S and 3S) and the remaining two exceeded the numeric criteria. These two units were recleaned and retested. Apartment 8N met the numeric criteria after the second cleaning (5 Samples), however apartment 2N (5 Samples) did not, thus it was recleaned and retested. After the third cleaning, apartment 2N (5 Samples) met the numeric criteria. Thus, for asbestos, the data we reviewed indicates that asbestos is not a hazard at 125 Cedar Street.

(Note: The original 143 asbestos samples were analyzed a second time using a slightly different method than EPA 40 CFR Part 763 Final Rule (AHERA). Although the results of the second analysis indicated that only one sample exceeded the numeric criteria, this data was not used because it is not a standard practice to reanalyze a filter and use the second set of data. Thus, the original data that showed additional exceedances of the numeric criteria was used which resulted in additional units being recleaned and retested.)

PAHs – The analytical data for polycyclic aromatic hydrocarbons (PAHs) that was reviewed consisted only of pre-cleaning samples. Post-cleaning samples were also collected, however the analytical results are not available at this date. When the analysis is completed for the post-cleaning samples, USEPA will review the data. We reviewed data for 66 wipe samples which were analyzed for a suite of 16 polycyclic aromatic hydrocarbons (PAHs). All of the samples had reported results of non-detect which indicates that PAHs could not be detected above the limit of detection of 5 μg. Evaluation of PAH data is accomplished by using a method called toxic equivalency factors (TEFs). The TEF methodology uses the data from seven of the individual PAHs, which are summed after being adjusted to provide an estimate of the

relative potency compared to benzo[a]pyrene, which is the most toxic of the PAHs. The TEF procedure generally uses ½ of the detection limit in the calculations when the reported value is below the detection limit. As the results from 125 Cedar Street were all non-detect, the TEF calculations yield a value of 580 $\mu g/m^2$ when calculated using ½ the detection limit. The PAH data set would have been more robust had the detection limit been set at 2.5 μg. If a detection limit of 2.5 μg would have been used, the TEF calculations would have yielded a value of 290 $\mu g/m^2$, assuming that the samples remained as non-detect. This distinction is important because the numeric criteria presented in the COPC document is 300 $\mu g/m^2$. In an attempt to make an informed evaluation of the PAH data from 125 Cedar Street, a comparison was made to PAH data which USEPA collected from 110 Liberty Street. The PAH data from 110 Liberty indicated that the concentration of the seven PAHs used in the TEF calculations were primarily non-detect at a detection limit of 2.5 μg. This indicates that even if a lower detection limit was used at 125 Cedar Street, the results would likely indicate non-detect for the PAHs, similar to what was observed at 110 Liberty Street. In addition, some of the PAHs that are not included in the calculation of TEFs (i.e., non-carcinogenic PAHs) were the most frequently detected PAHs at 110 Liberty and were detected at concentrations above 5 μg. The non-carcinogenic PAHs are not included in the TEF calculations because they are less toxic than the carcinogenic PAHs, therefore identification of a non-carcinogenic PAH would not increase the TEF value. Thus, it would be expected that some of the non-carcinogenic PAHs would have been detected above 5 μg if they were present at 125 Cedar Street. The combination of these two factors provides evidence that the data collected at 125 Cedar Street can be accepted even though the detection limit was not as low as it could have been. In addition, the pre-cleaning PAH results are similar to the results observed at 110 Liberty Street. The post-cleaning PAH samples at 110 Liberty Street were all below the numeric criteria as well. Therefore, even though the post-cleaning samples from 125 Cedar Street were not evaluated, it is expected that the samples will all be below the numeric criteria based on the pre-cleaning samples being below the criteria and the similarity to what was observed at 110 Liberty Street. Thus, for PAHs, the data we reviewed indicates that PAHs are not a hazard at 125 Cedar Street.

Dioxin – The analytical data for dioxin that was reviewed consisted only of pre-cleaning samples. Post-cleaning samples were also collected, however the analytical results are not available at this date. When the analysis is completed for the post-cleaning samples, USEPA will review the data. We reviewed 66 wipe results which were analyzed for dioxin. Evaluation of dioxin results is similar to that reported above for PAHs in that the results for individual congener groups are adjusted and summed to provide toxic equivalency for 2,3,7,8-TCDD, the most toxic dioxin congener, using a process called toxic equivalents (TEQs). Similar to the PAH data the TEQ calculations use ½ of the detection limit in the TEQ calculations. The detection limit was acceptable and all of the samples met the numeric criteria of 4 ng/m^2. The pre-cleaning dioxin results are similar to the results observed at 110 Liberty Street. The post-cleaning dioxin samples at 110 Liberty Street were all below the numeric criteria as well. Therefore, even though the post-cleaning samples from 125 Cedar Street were not evaluated, it is expected that the samples will all be below the numeric criteria based on the pre-cleaning samples being below the criteria and the similarity to what was observed at 110 Liberty Street. Thus, for dioxin, the data we reviewed indicates that dioxin is not a hazard at 125 Cedar Street.

Lead – We reviewed approximately 72 wipe sample results which were analyzed for lead. There were 10 samples that were above the numeric criteria, of 25 $\mu g/ft^2$, listed in the COPC document. The apartments which exceeded the numeric criteria were 12N, 11N, 10S, 10N, 9N, 8S, 8N, 3S, and 2S. These apartments were recleaned and retested (14 samples). Six units met the numeric criteria, however three units (12N, 11N, and 10S) did not meet the numeric criteria. These three units were recleaned and retested. Apartment 12N and 10S met the numeric criteria after the second cleaning. Apartment 11N did not meet the numeric criteria and required a third cleaning. The results for apartment 11N after the third cleaning were below the numeric criteria. Thus, for lead, the data we reviewed indicates that lead is not a hazard at 125 Cedar Street.

Fibrous glass – We reviewed approximately 120 PCM results reported as fibrous glass analysis. The highest detected concentration was 0.009 f/cc, which is below the numeric criteria of 0.01 f/cc in the COPC document. Thus, for fibrous glass, the data we reviewed indicates that fibrous glass is not a hazard at 125 Cedar Street.

Mercury – We reviewed 66 wipe results which were analyzed for mercury. Seventeen samples were below the detection limit of 0.000478 $\mu g/m^2$ and the highest detected concentration was 0.0164 $\mu g/m^2$. The COPC document does not establish a numeric criteria for mercury, however since USEPA is collecting 250 wipe samples for mercury as part of residential cleanup program a numeric criteria is currently being developed. The draft value, which is subject to revision based upon further evaluation of exposure parameters, is currently 94 $\mu g/m^2$. Comparison of the mercury concentrations detected to the draft numeric criteria of 94 $\mu g/m^2$ indicates that mercury is three orders of magnitude below the draft numeric criteria. Thus, for mercury, the data we reviewed indicates that mercury is not a hazard at 125 Cedar Street.

Silica – We reviewed the data for 19 air samples which were analyzed for silica (i.e., total quartz). All of the samples were below the detection limit of 10 μg. The numeric criterion that USEPA has proposed in the COPC document is 1 $\mu g/m^3$. Although the COPC document has chosen the value of 1 $\mu g/m^3$, the available methodology for collecting indoor air samples for silica cannot achieve a value this low, therefore a result that is below the detection limit is considered to be protective of public health. This is the same approach we are using at 110 Liberty Street, where the detection limit was 4 μg. Thus, for silica, the data we reviewed indicates that silica is not a hazard at 125 Cedar Street.

CLEANING REQUEST FORM

On behalf of myself and any other residents of apartment _____ , 125 Cedar Street, Manhattan (the "Residence"), I hereby request that the New York City Department of Environmental Protection (DEP) perform the cleaning and monitoring work specified in the attached documents entitled "Cleaning Procedures for 125 Cedar Street" and "Monitoring Contractor - Scope of Work for 125 Cedar Street, Manhattan" (the "Cleaning Work") in said apartment.

The Cleaning Work is to be performed by DEP in accordance with DEP's role under the Federal Response Plan and pursuant to the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The United States Environmental Protection Agency (EPA) will act in an oversight capacity with regard to said work.

To facilitate the performance of the Cleaning Work, I agree to the following:

1. Employees, authorized representatives, and contractors of DEP shall have access to all areas of the Residence and all personal property in the Residence for as long as necessary to perform the Cleaning Work.

2. I will inform DEP as to any considerations which would affect the Cleaning Work, including, for example, time restrictions and appropriate means to access the Residence.

3. The Cleaning Work will be performed by contractors retained by DEP. Said contractors are required to maintain, at all times during the Cleaning Work, insurance coverage for commercial general liability, workers compensation, environmental impairment liability, and employee dishonesty related to the Cleaning Work.

4. The Cleaning Work may require use of the Residence's electricity and water.

5. Insurance payments or any other form of compensation received by the Resident(s) which have been or will be received for activities covered by the Cleaning Work and which have not been spent for such purposes will be paid to DEP.

6. I will use best efforts to ensure the safety and security of fragile or valuable objects located in the Residence, including but not limited to jewelry, silverware, fine china, decorative objects and works of art. Such efforts will include, at a minimum, either the removal of such items from the Residence prior to the beginning of the Cleaning Work or the securing of such items in sealed containers. I will identify in writing to DEP all fragile or valuable objects which cannot be removed or secured as described above so that provision may be made for their protection. The estimated value of such objects shall be indicated.

7. The Cleaning Work will be performed in all areas of the Residence unless I instruct DEP in writing to the contrary. As described in Section 16 of the attached document entitled "Cleaning Procedures for 125 Cedar Street", I will identify all items within the Residence which are to be cleaned. Items not identified for cleaning will be disposed of by the cleaning contractor.

8. The Residence may not be reoccupied until 48 hours after the conclusion of the Cleaning Work, as determined by DEP.

9. A copy of the air monitoring results will be provided to the Resident within 96 hours of the conclusion of the Cleaning Work.

10. Resident will be given an opportunity to walk through the apartment with the contractors prior

to the commencement of the Cleaning Work.

11. A security guard will be posted at the main entrance to 125 Cedar Street throughout the duration of the Cleaning Work in the Building.

12. By signing this Request Form, I am not waiving any claims with regard to the safety or habitability of the Residence, even after the completion of the Cleaning Work.

13. I recognize that the Clearance Criteria to be used to determine when the Cleaning Work has been completed are those that have been established by EPA for cleanup activities resulting from the collapse of the World Trade Center. The Clearance Criteria are set forth in the "Monitoring Contractor - Scope of Work for 125 Cedar Street, Manhattan" at page 4.

SIGNATURE:

_____ _____

Date

_____

Name (Print)

Testimony to EPA Expert Panel on WTC contamination
July 26, 2004
Marjorie J. Clarke, Ph.D.

The EPIC report, which has just become available, show a number of aerial photographs of WTC dust accumulations and plumes visible from the air that are almost three years old. What is the intended purpose of displaying aerial photographs of dust in lower Manhattan at this time? Is EPA interpreting the report to demonstrate conclusively that there was zero harmful dust outside a perimeter of dust visible from so far away? EPA is appearing to interpret this report to suggest that satellite and aerial photos should be the means of establishing a limit of where contamination occurred and therefore, the furthest extent of where cleaning should occur. If this is the case, that EPA is drawing lines around dust visible from airplanes is even more ludicrous than EPA saying that apartments should be considered eligible for hazardous waste remediation based only on visual inspection by an inspector on the ground. Even this report has caveats that dust may have been present but not enough to obscure roadlines or cross-walks. Talk to people in Brooklyn. Councilmember Yassky said during a City Council hearing that he saw it "snow" in Brooklyn Heights. Residents much farther into Brooklyn reported papers and other debris from the WTC. Is such ground truthing data to be disregarded? Dust is very light and can travel further. Wipe tests indoors have shown repeatedly that even close visual inspection has been inaccurate at indicating unacceptable levels of WTC asbestos or other pollutants present inside of apartments, either on hard or soft surfaces.

Because dusts containing unacceptable levels of toxic substances cannot even be reliably determined by visual inspection on the ground, and that wipe tests and ultrasonication and the like are necessary to accurately measure the levels of toxics, these photographs should only be used to show the absolute *minimum extent* of harmful dust accumulations. Furthermore, it is important to note that the dusts that settled out immediately were the heaviest, largest particles, not the finer, more inhalable particles that have a greater likelihood of having surfaces coated with toxic organics and heavy metals. As I have testified, these larger particles, visible in aerial photographs, would primarily consist of gypsum and other building materials, which have lower toxicity. It's the fine, toxic particulate that spread further that is of greater interest in preventing illness.

Why has EPA chosen to fixate only on showing map after map of the dust cloud going southwest towards Jersey City? This is a snapshot in time that isn't even specified on the map. How long and when was this the wind direction? What does the wind rose look like for the period from 9/11 until the fires were extinguished in early 2002? During the afternoon of 9/12/01, I witnessed the wind shift from going towards Brooklyn to carry pollutants from the WTC over Manhattan, Queens and the Bronx. I could smell it when I was on both 42nd St and and west 72nd St. Most of the time, the winds carried the plume over Brooklyn. All the images shown in the EPIC report (and all reports) should have the time stamp, not just the date, and EPA should not be using aerial photographs to suggest that the wind went in only one direction. (Matt Lorber has done this on at least two occasions that I have witnessed in conferences and presentations using photographs that depict the wind carrying the plume only in a southerly direction over the harbor.) EPA should be studying the plume and calculating the quantity of dust and toxics being

emitted each day over the 4+ month period and the direction of the wind during each day to better calculate where deposition occurred and rate of deposition.
The USGS overflights in this time frame which gathered quite a bit of data on species of asbestos and other materials, finding these at least as far north as 23rd St (that is the northern edge of the map). The following urls show some of these maps.
http://pubs.usgs.gov/of/2001/ofr-01-0429/dustplume.html
http://pubs.usgs.gov/of/2001/ofr-01-0429/feats-ch.html
http://pubs.usgs.gov/of/2001/ofr-01-0429/imspec.html

That collections of fibers of asbestos could be seen from such a distance and far north of the WTC in Manhattan shows that it would be erroneous to draw a boundary near Canal.

Why has EPA limited itself to a 2-day period following the collapses? The fires continued for over 100 days and there would have been toxic fallout from the plume of emissions from those fires.

In the Questions and Answers document, EPA answers that the EPIC document proves that EPA addressed the worst contaminated areas. This answer is self-serving, in that it only addressed about 1/5 of the residential buildings and none of the commercial and institutional buildings.

As a result of the inadequate level of scientific investigation demonstrated after the WTC collapses and fires (that we now have to depend, years later, on aerial shots, rather than on scientifically collected samples on the ground in a dense, but very large sampling grid), it does not appear that EPA has learned lessons that will become part of the emergency response in the future. Even in the EPIC report it was stated that the aerial photography was limited in extent, and that the results do not indicate that dust could exist outside the boundaries of the dust visible from space. I am afraid that EPA may be trying to use this report to limit the extent of remediation. I hope I'm wrong. For the next environmental disaster, will EPA immediately gather all its qualified personnel and sampling equipment from all over the US to conduct thorough studies, and then to commence thorough remediation outdoors AND indoors Immediately, or are we doomed to repeat this failure to exert due diligence to learn the truth and clean up the contamination?

Just as the 9/11 Commission made recommendations to change government structures and policies to improve emergency response and prevent future terrorist disasters, so should this panel make such recommendations to protect public health in the future.